



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

PERNALES 1681  
LOG L-2190  
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FILE: \_\_\_\_\_  
REPLY TO THE ATTENTION OF: \_\_\_\_\_

SEP 03 1998

Mr. Johnny W. Reising  
United States Department of Energy  
Feed Materials Production Center  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705

SRF-5J

RE: A7 PSP

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) Project Specific Plan (PSP) for Waste Acceptance Criteria (WAC) attainment sampling of Area 7 (A7) soils.

The PSP provides a plan for surface and subsurface soil sampling in A7 before various Operable Unit 4 Silo project construction activities commence.

U.S. EPA has identified several issues with the PSP. It appears the sampling procedures will not meet the objective of determining if the WAC has been obtained. Also, this PSP does not provide information included in other similar soil PSPs regarding how the PSP activities relate to other integrated remedial design packages. U.S. EPA has attached its comments on the PSP.

Therefore, U.S. EPA disapproves the A7 PSP pending receipt of adequate responses to the attached comments and their incorporation into the PSP. U.S. DOE must submit a revised PSP along with responses to comments within thirty (30) days receipt of this letter.

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Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,



James A. Saric  
Remedial Project Manager  
Federal Facilities Section  
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO  
Bill Murphie, U.S. DOE-HDQ  
John Bradburne, FERMCO  
Terry Hagen, FERMCO  
Tom Walsh, FERMCO



Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 2.2.3 Page #: 15 Line #: Not Applicable (NA)  
 Original Specific Comment #: 5

Comment: This section discusses screening of subsurface soil and collection of high-biased samples in addition to the planned samples. As indicated in Original Specific Comment 2, where sampling intervals have not been selected in advance, samples from the intervals with the highest activities should be selected for analysis, even if a given activity does not exceed the action level for total activity stated in Section 2.2.3. Such samples will be biased high with regard to their uranium concentrations, which is appropriate for "not to exceed" criteria such as the WAC. If the distribution of technetium 99 is the same as the distribution of uranium, the selected samples will also be biased high with regard to their technetium 99 concentrations. If the distributions are not the same, the samples selected will be "random" with regard to technetium 99. If multiple high-activity intervals are encountered, additional samples should be collected, but the samples selected for laboratory analysis should be from the intervals exhibiting the highest activities, regardless of the activity levels.

Commenting Organization: U.S. EPA Commentor: Saric  
 Section #: 3.0 Page #: 18 Line #: NA  
 Original Specific Comment #: 6

Comment: This section discusses use of real-time instruments in Area 7. These instruments will probably encounter interference from shine as a result of the presence of radium 226 and its daughters. Recent work at Soil Pile 5 provided data that were used to develop an approach for identifying and dealing with shine from uranium. No such data exist for shine from radium 226, although radium 226 shine affects the uranium measurements of real-time instruments that use sodium iodide detectors. The sampling described in the PSP will provide an opportunity to fill this data gap. When real-time uranium data are collected, the accompanying radium data should be carefully checked for indications of shine. In addition, at least some of the surface soil samples should be analyzed for radium 226 to help distinguish shine from local contamination. The text should be revised accordingly.

Commenting Organization: U.S. EPA Commentor: Saric  
 Appendix #: D Page #: NA Line #: NA  
 Original Specific Comment #: 7

Comment: Appendix D is entitled "SP-5 Analytical Data Summary." The title should be changed to "Historical Data Summary for Area 7 Soils in the Silos Project Area."